

**REMARKS**

The Examiner has objected to claims 23-30 as being dependent upon a rejected base claim. At this time the Applicant declines the suggestion of rewriting these claims in independent form but reserves the right to do so at a future time. The Applicant respectfully notes that claims 9-11 might be similarly allowable in light of claims 23-30 upon second review.

Claims 1, 3, 5, 6, 12, and 19 have been amended to further particularly point out and distinctly claim subject matter regarded as the invention.

Claim 1 has been amended to correct antecedent basis and improve readability.

Claims 3, 5, and 6 have been amended to improve readability.

Claim 12 has been amended to improve clarity and antecedent basis.

Claim 19 has been amended to improve clarity.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current Amendment. The attached page is captioned "Version with Markings to Show Changes Made."

**Objection to Drawings**

The drawings stand objected to under 37 C.F.R. § 1.83(a) as allegedly failing to show every feature of the invention specified in the claims. This objection is respectfully traversed.

Specifically, the Office Action states that the "packet modifier" of claims 12 and 19 must be shown or the feature cancelled from the claims.

The packet modifier is contained in FIGS. 3-5. It is implicitly a part of the service selection gateway (SSG). One of ordinary skill would recognize that this would not necessarily be the case hence the claims are more general than the example embodiment shown. (FIG. 3 reference 50 and page 9, lines 12-13; FIG. 4 reference 106 and page 10, lines 21-23; FIG. 5 reference 114 and page 11, line 22 through page 12, line 2) No amendment to the figures is required.

The 35 U.S.C. § 112 Rejection

Claims 1, 7, 12, 17, 18, and 19 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter Applicant regards as the invention. This objection is respectfully traversed.

Specifically, the Office Action notes that in claim 1 the limitation of "the session" lacks antecedent basis. With this Amendment, claim 1 has been corrected.

Further, it is noted that in claims 7, 17, and 18, the limitation of "the ToS/Differentiated [Services field]" lacks antecedent basis. However, the limitation is inherent in an "IP packet" which is contained in claims 6, 15, and 16 from which claims 7, 17, and 18 depend, respectively. So no claim amendment is required. (FIG. 1B reference 26 and page 2, lines 10-13)

With respect to claims 12 and 19, it is noted that the phrase "a data communications system to the data communications system" is unclear. With this Amendment, claims 12 and 19 have been corrected.

With this amendment, it is respectfully asserted that the claims satisfy the statutory requirements and are in condition for allowance.

The 35 U.S.C. § 103 Rejection

According to M.P.E.P. § 2143,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

Claims 1-22 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Zhang et al.* in view of *Goss*. This rejection is respectfully traversed.

Specifically, the Office Action states that Zhang discloses the network environment and that "Goss teaches the setting QoS for packet sent by a user (e.g. col. 2, lines 20-22), configuring

the user with the QoS level (col. 1, lines 13-14), and setting the QoS bits accordance with the QoS level (col. 2, lines 56-59) for guarantee the quality of service and connection to the user."

A review of *Goss* in general, including the specific citations, highlights at least two subtle but important distinctions between *Goss* and the present invention. First, *Goss* never actually *sets* the QoS bits. *Goss* assumes that some assignment has been made somewhere else and uses this assignment to reduce congestion. This distinction might be most clearly seen in claim 1 where the method "[identifies], by said processing element, a quality of service indicator for said cell from the cell header portion." (Col. 4, lines 42-44) Similarly, in claim 9 the "processing element...[analyzes] a header portion of said received cell to determine a quality of service associated therewith." (Col. 5, lines 50-51) The acts of identifying and analyzing are not the same as the act of "setting" in the present claims. A second distinction is that the QoS bits in *Goss* are located in the internal header of the ATM cell. In contrast, the QoS bits in the present claims are located directly in the "packets."

Given these differences, the cited prior art can not be said to make the claimed invention obvious. In view of the above, it is respectfully asserted that the claims are now in condition for allowance.

Request for Allowance

In view of the foregoing, reconsideration and an early allowance of this application are earnestly solicited.

If any matters remain which could be resolved in a telephone interview between the Examiner and the undersigned, the Examiner is invited to call the undersigned to expedite resolution of any such matters.

Respectfully submitted,  
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**VERSION WITH MARKINGS TO SHOW CHANGES MADE****IN THE CLAIMS**

Claims 1, 3, 5, 6, 12, and 19 have been amended as follows:

1. (Amended Once) A method of setting Quality of Service (QoS) bits of packets sent by a user of a data communications network, comprising:
  - obtaining a user service profile configured with a QoS level for the user in response to a user log-in attempt to a service selection gateway (SSG);
  - routing all packets originated by the user through the SSG during [the] a session;
  - setting, in the SSG, the QoS bits of packets originated by the user in accordance with the QoS level for the user; and
  - passing, after said QoS bits have been set, said packets on to the data communications network.

3. (Amended Once) A method of setting [the] Quality of Service (QoS) bits of packets sent by a user of a data communications network, comprising:
  - initiating a request to an authentication, authorization and accounting (AAA) server in response to the user's attempt to log-in;
  - receiving, in response to said request, a user service profile corresponding to the user, said user service profile including a Quality of Service field; and
  - using said Quality of Service field to set the QoS bits within said packets transmitted by the user.

5. (Amended Once) A method of setting [the] Quality of Service (QoS) bits of packets sent by a user of a data communications network, comprising:

at a service selection gateway to which the user is in communication, a request from the user to assign a particular Quality of Service level to at least one packet flow transmitted by the user;

assigning, in response to said request, a Quality of Service level to said at least one packet flow;

setting said QoS bits within said packets belonging to said at least one packet flow received at the service selection gateway in accordance with said Quality of Service level; and transmitting said packets belonging to said at least one packet flow to the data communications network.

6. (Amended Once) A method in accordance with claim 5 wherein all of said packets of said at least one packet flow [in an] are IP [packet] packets.

12. (Amended Once) An apparatus for setting Quality of Service (QoS) bits of packets sent by a user of a data communications system [to the data communications system], said apparatus comprising:

a service selection gateway (SSG) in communication with the user, said SSG also in communication with an authentication, authorization and accounting (AAA) server, said SSG receiving a user service profile including a QoS level from the AAA server in response to an attempt to log-in by the user; and

a packet modifier associated with said SSG, said packet modifier modifying the QoS bits of packets sent by the user to reflect the QoS level received for the user from the AAA server.

19. (Amended Once) An apparatus for setting Quality of Service (QoS) indicator bits of packets sent by a user of a data communications system [to the data communications system], said apparatus comprising:

a service selection gateway (SSG) in communication with the user and the data communications network;

a packet modifier associated with said SSG, responsive to a QoS request by the user, setting a QoS bit field of packets sent by the user to the data communications network via the SSG.